

## SEQUENCE LISTING

&lt;110&gt; AVIDIS SA

&lt;120&gt; Production of Multimeric Fusion Proteins using a C4bp Scaffold

&lt;130&gt; AHB/FP6155089

&lt;140&gt;

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&lt;150&gt; EP 02292043.3

&lt;151&gt; 2002-08-14

&lt;160&gt; 29

&lt;170&gt; PatentIn Ver. 2.1

&lt;210&gt; 1

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

Glu	Thr	Pro	Glu	Gly	Cys	Glu	Gln	Val	Leu	Thr	Gly	Lys	Arg	Leu	Met
1				5					10					15	

Gln	Cys	Leu	Pro	Asn	Pro	Glu	Asp	Val	Lys	Met	Ala	Leu	Glu	Val	Tyr
			20					25					30		

Lys	Leu	Ser	Leu	Glu	Ile	Glu	Gln	Leu	Glu	Leu	Gln	Arg	Asp	Ser	Ala
		35					40					45			

Arg	Gln	Ser	Thr	Leu	Asp	Lys	Glu	Leu
		50				55		

&lt;210&gt; 2

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Oryctolagus cuniculus

&lt;400&gt; 2

Glu	Val	Pro	Glu	Gly	Cys	Glu	Gln	Val	Gln	Ala	Gly	Arg	Arg	Leu	Met
1				5					10					15	

Gln	Cys	Leu	Ala	Asp	Pro	Tyr	Glu	Val	Lys	Met	Ala	Leu	Glu	Val	Tyr
			20					25					30		

Lys	Leu	Ser	Leu	Glu	Ile	Glu	Leu	Leu	Glu	Leu	Gln	Arg	Asp	Lys	Ala
		35					40					45			

Arg	Lys	Ser	Ser	Val	Leu	Arg	Gln	Leu
		50				55		

&lt;210&gt; 3

&lt;211&gt; 55

&lt;212&gt; PRT

<213> Rattus sp.

<400> 3

Glu Val Pro Lys Asp Cys Glu His Val Phe Ala Gly Lys Lys Leu Met  
1 5 10 15

Gln Cys Leu Pro Asn Ser Asn Asp Val Lys Met Ala Leu Glu Val Tyr  
20 25 30

Lys Leu Thr Leu Glu Ile Lys Gln Leu Gln Leu Gln Ile Asp Lys Ala  
35 40 45

Lys His Val Asp Arg Glu Leu  
50 55

<210> 4

<211> 54

<212> PRT

<213> Mus sp.

<400> 4

Glu Ala Ser Glu Asp Leu Lys Pro Ala Leu Thr Gly Asn Lys Thr Met  
1 5 10 15

Gln Tyr Val Pro Asn Ser His Asp Val Lys Met Ala Leu Glu Ile Tyr  
20 25 30

Lys Leu Thr Leu Glu Val Glu Leu Leu Gln Leu Gln Ile Gln Lys Glu  
35 40 45

Lys His Thr Glu Ala His  
50

<210> 5

<211> 67

<212> PRT

<213> Bos sp.

<400> 5

Glu Tyr Pro Glu Gly Cys Glu Gln Val Val Thr Gly Arg Lys Leu Leu  
1 5 10 15

Gln Cys Leu Ser Arg Pro Glu Glu Val Lys Leu Ala Leu Glu Val Tyr  
20 25 30

Lys Leu Ser Leu Glu Ile Glu Ile Leu Gln Thr Asn Lys Leu Lys Lys  
35 40 45

Glu Ala Phe Leu Leu Arg Glu Arg Glu Lys Asn Val Thr Cys Asp Phe  
50 55 60

Asn Pro Glu  
65

<210> 6

<211> 57

<212> PRT  
 <213> Sus scrofa

<400> 6  
 Glu Tyr Pro Glu Asp Cys Glu Gln Val His Glu Gly Lys Lys Leu Met  
   1                  5                  10                  15  
 Glu Cys Leu Pro Thr Leu Glu Glu Ile Lys Leu Ala Leu Ala Leu Tyr  
                   20                  25                  30  
 Lys Leu Ser Leu Glu Thr Asn Leu Leu Glu Leu Gln Ile Asp Lys Glu  
           35                  40                  45  
 Lys Lys Ala Lys Ala Lys Tyr Ser Thr  
       50                  55

<210> 7  
 <211> 56  
 <212> PRT  
 <213> Cavia porcellus

<400> 7  
 Glu Val Pro Glu Glu Cys Lys Gln Val Ala Ala Gly Arg Lys Leu Leu  
   1                  5                  10                  15  
 Glu Cys Leu Pro Asn Pro Ser Asp Val Lys Met Ala Leu Glu Val Tyr  
                   20                  25                  30  
 Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Lys Glu Lys Tyr Val Lys  
           35                  40                  45  
 Ile Gln Glu Lys Phe Ser Lys Glu  
       50                  55

<210> 8  
 <211> 59  
 <212> PRT  
 <213> Mus sp.

<400> 8  
 Glu Val Leu Glu Asp Cys Arg Ile Val Ser Arg Gly Ala Gln Leu Leu  
   1                  5                  10                  15  
 His Cys Leu Ser Ser Pro Glu Asp Val His Arg Ala Leu Lys Val Tyr  
                   20                  25                  30  
 Lys Leu Phe Leu Glu Ile Glu Arg Leu Glu His Gln Lys Glu Lys Trp  
           35                  40                  45  
 Ile Gln Leu His Arg Lys Pro Gln Ser Met Lys  
       50                  55

<210> 9  
 <211> 52  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Variant of the  
C4bp core protein

&lt;400&gt; 9

Cys	Glu	Gln	Val	Leu	Thr	Gly	Lys	Arg	Leu	Met	Gln	Cys	Leu	Pro	Asn
1				5					10					15	

Pro	Glu	Asp	Val	Lys	Met	Ala	Leu	Glu	Val	Tyr	Lys	Leu	Ser	Leu	Glu
		20						25					30		

Ile	Glu	Gln	Leu	Glu	Leu	Gln	Arg	Asp	Ser	Ala	Arg	Gln	Ser	Thr	Leu
		35					40					45			

Asp	Lys	Glu	Leu
		50	

&lt;210&gt; 10

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Variant of the  
C4bp core protein

&lt;400&gt; 10

Glu	Thr	Pro	Glu	Gly	Cys	Glu	Gln	Val	Leu	Thr	Gly	Lys	Arg	Leu	Met
1				5					10					15	

Gln	Cys	Leu	Pro	Asn	Pro	Glu	Asp	Val	Lys	Met	Ala	Leu	Glu	Val	Tyr
		20					25						30		

Lys	Leu	Ser	Leu	Glu	Ile	Lys	Gln	Leu	Glu	Leu	Gln	Arg	Asp	Ser	Ala
		35					40					45			

Arg	Gln	Ser	Thr	Leu	Asp	Lys	Glu	Leu
		50				55		

&lt;210&gt; 11

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Variant of the  
C4bp core protein

&lt;400&gt; 11

Cys	Glu	Gln	Val	Leu	Thr	Gly	Lys	Arg	Leu	Met	Gln	Cys	Leu	Pro	Asn
1				5					10					15	

Pro	Glu	Asp	Val	Lys	Met	Ala	Leu	Glu	Val	Tyr	Lys	Leu	Ser	Leu	Glu
		20						25					30		

Ile	Lys	Gln	Leu	Glu	Leu	Gln	Arg	Asp	Ser	Ala	Arg	Gln	Ser	Thr	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35

40

45

Asp Lys Glu Leu  
50

<210> 12  
<211> 57  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Variant of the  
C4bp core protein

<400> 12  
Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys Arg Leu Met  
1 5 10 15  
Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Ile Tyr  
20 25 30  
Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg Asp Ser Ala  
35 40 45  
Arg Gln Ser Thr Leu Asp Lys Glu Leu  
50 55

<210> 13  
<211> 57  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Variant of the  
C4bp core protein

<400> 13  
Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys Arg Leu Met  
1 5 10 15  
Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Ile Tyr  
20 25 30  
Lys Leu Ser Leu Glu Ile Lys Gln Leu Glu Leu Gln Arg Asp Ser Ala  
35 40 45  
Arg Gln Ser Thr Leu Asp Lys Glu Leu  
50 55

<210> 14  
<211> 50  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Variant of the

## C4bp core protein

&lt;400&gt; 14

Glu Gly Cys Glu Gln Ala Leu Thr Gly Lys Arg Leu Met Gln Cys Leu  
 1 5 10 15

Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Ile Tyr Lys Leu Ser  
 20 25 30

Leu Glu Ile Lys Gln Leu Glu Leu Gln Arg Asp Ser Ala Arg Gln Ser  
 35 40 45

Thr Leu  
 50

&lt;210&gt; 15

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Variant of the  
 C4bp core protein

&lt;400&gt; 15

Glu Thr Pro Glu Gly Ser Glu Gln Val Leu Thr Gly Lys Arg Leu Met  
 1 5 10 15

Gln Ser Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Val Tyr  
 20 25 30

Lys Leu Ser Leu Glu Ile Lys Gln Leu Glu Leu Gln Arg Asp Ser Ala  
 35 40 45

Arg Gln Ser Thr Leu Asp Lys Glu Leu  
 50 55

&lt;210&gt; 16

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Variant of the  
 C4bp core protein

&lt;400&gt; 16

Glu Gly Ser Glu Gln Ala Leu Thr Gly Lys Arg Leu Met Gln Ser Leu  
 1 5 10 15

Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Ile Tyr Lys Leu Ser  
 20 25 30

Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg Asp Ser Ala Arg Gln Ser  
 35 40 45

Thr Leu Asp Lys

50

<210> 17  
 <211> 5  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Flexible  
 linker

<400> 17  
 Gly Gly Gly Gly Ser  
 1 5

<210> 18  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Flexible  
 linker

<400> 18  
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser  
 1 5 10

<210> 19  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Flexible  
 linker

<400> 19  
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser  
 1 5 10 15

<210> 20  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Flexible  
 linker

<400> 20  
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly  
 1 5 10 15

Gly Gly Gly Ser

20

<210> 21  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Thrombopoeitin  
 agonist peptide

<400> 21  
 Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
       1                  5                  10

<210> 22  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Downstream box  
 peptide sequence

<400> 22  
 Met Ala Ser Met Asn His Lys Gly Ser  
       1                  5

<210> 23  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 23  
 cccgcggatc cgagaccccc gaaggctgtg a

31

<210> 24  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 24  
 ccccgaatt cttattatag ttctttatcc aaagtgg

37

<210> 25  
 <211> 54  
 <212> DNA  
 <213> Artificial Sequence



&lt;220&gt;

<223> Description of Artificial Sequence: Sequence  
encoding a 6xHistidine tag

&lt;400&gt; 25

catatgcggg gttctcatca tcatcatcat catggtcttg ttccgcgtgg atcc 54

&lt;210&gt; 26

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Amino acid  
sequence produced by plasmid pAVD 93

&lt;400&gt; 26

Met Arg Gly Ser His His His His His His Gly Leu Val Pro Arg Gly  
1 5 10 15Ser Glu Thr Pro Glu Gly Cys Glu Gln Val Leu Thr Gly Lys Arg Leu  
20 25 30Met Gln Cys Leu Pro Asn Pro Glu Asp Val Lys Met Ala Leu Glu Val  
35 40 45Tyr Lys Leu Ser Leu Glu Ile Glu Gln Leu Glu Leu Gln Arg Asp Ser  
50 55 60Ala Arg Gln Ser Thr Leu Asp Lys Glu Leu  
65 70

&lt;210&gt; 27

&lt;211&gt; 38

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 27

ggggccccc tatggcgag tatgaagatg gtaaacag 38

&lt;210&gt; 28

&lt;211&gt; 48

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 28

ggggaattct taggatccag aaccttttt ctcggacaga tatttcac 48

<210> 29  
<211> 303  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Promoter and  
C4bp coding region in pAVD77

<400> 29  
gatctcgatc ccgcgaaatt aatacgactc actatagga gaccacaacg gtttcctct 60  
agaataaatt ttgtttaact ttaagaagga gatatacata tggctagcat gaatcacaaa 120  
ggatccgaga ccccggaagg ctgtgaacaa gtgctcacag gcaaaagact catgcagtgt 180  
ctcccaaacc cagaggatgt gaaaatggcc ctggaggat ataagctgtc tctggaaatt 240  
gaacaactgg aactacagag agacagcgca agacaatcca ctttgataa agaactataa 300  
taa 303